



# UNITED STATES PATENT AND TRADEMARK OFFICE

TP  
UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/719,576	11/21/2003	Heiko K. Sacher	CS23123US	3260
7590	09/11/2006		EXAMINER	
Randi L. Karpinia Motorola, Inc. Law Department 8000 West Sunrise Boulevard Fort Lauderdale, FL 33322			PESIN, BORIS M	
			ART UNIT	PAPER NUMBER
			2174	

DATE MAILED: 09/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)
	10/719,576	SACHER ET AL.
	Examiner	Art Unit
	Boris Pesin	2174

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) Responsive to communication(s) filed on 26 June 2006.
- 2a) This action is **FINAL**.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) Claim(s) 1-34 is/are pending in the application.
  - 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-34 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.
 

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.

- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Amendment***

This communication is responsive to the amendment filed 6/26/2006.

Claims 1-34 are pending in this application. Claims 1, 11, 25, and 31 are independent claims. In the amendment filed 6/26/2006, Claim 25 was amended. This action is made Final.

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Will (US 6392640) in view of Bodnar et al. (US 6310634).

In regards to claim 1, Will teaches a method of operating an electronic device comprising the steps of: initiating entry of a content string (Figure 1B); determining a most probable completion alternative using a database (Figure 1B); displaying the most probable completion alternative (Figure 1B); determining whether a user has accepted the most probable completion alternative (Figure 1B); and adding the most probable completion alternative to the content string when the user has accepted the most probable completion alternative (Figure 1B). Will does not teach determining a most probable completion alternative using a personalized and learning database. Bodnar teaches, "By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Will with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to claim 2, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, wherein the user accepting the most probable completion alternative comprises a user pressing a control of a navigation key (Bodnar Figure 1B, Element 103).

In regards to claim 3, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, wherein the user accepting the most probable

completion alternative comprises a user pressing a soft key (Bodnar Figure 1B, Element 103).

In regards to claim 4, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, wherein the step of adding further comprises: changing one or more display characteristics of the most probable completion alternative (Bodnar Figure 12A, Element 103).

In regards to claim 5, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: detecting a user input for going back in the content string after the adding step; and eliminating the most probable completion alternative from the content string (Bodnar Figure 12B, Element 103).

In regards to claim 6, Will and Bodnar do not specifically teach a method of operating an electronic device as defined in claim 5, wherein the user input comprises a user pressing a left control of a navigation key. Official notice is given that it is notoriously well known in the art to have a left and a right control buttons. It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Will and Bodnar and include a left navigation key with the motivation to provide the user with a simpler imputing means.

In regards to claim 7, Will and Bodnar teach the method of operating an electronic device as defined in claim 1 wherein the database comprises recently used data selected from a group consisting of one or more new words, one or more word associations, one or more context associations, one or more sensitivity associations,

one or more Uniform Resource Locators, and one or more electronic mail addresses ("By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." Bodnar, Abstract).

In regards to claim 8, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: dismissing the most probable completion alternative when the user does not accept the most probable completion alternative; and displaying a next most probable completion alternative (Bodnar Figure 1A, Element 104).

In regards to claim 9, Will and Bodnar teach the method of operating an electronic device as defined in claim 1, further comprising the steps of: overriding the most probable completion alternative by a user input; and displaying a next most probable completion alternative (Bodnar Figure 1A, Element 104).

In regards to claim 10, Will and Bodnar teach the method of operating an electronic device as recited in claim 9, wherein the step of overriding comprises: the user pressing a first set of controls of the navigation key to indicate the overriding; and the user pressing a second set of controls of the navigation key to scroll through one or more completion alternates (Bodnar Figure 1A, Element 103).

In regards to claim 11, Will teaches a method of operating an electronic device comprising the steps of: detecting a content entry (Figure 1B); receiving a request by a user for a content prediction (Figure 1B); displaying the most probable next content

prediction (Figure 1B); determining whether a user has accepted the most probable next content prediction (Figure 1B); and adding the most probable next content prediction to the content entry when the user has accepted the most probable next content prediction (Figure 1B). Will does not teach identifying a most probable next content prediction by using a personalized and learning database. Bodnar teaches, "By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Will with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to claim 12, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the request by the user for prediction comprises the user pressing a first control of a navigation key (Will, Figure 1B, Element 103).

In regards to claim 13, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the user accepts the most probable next content prediction as displayed by pressing a second control of the navigation key (Will, Figure 1B, Element 103).

In regards to claim 14, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the user accepts the most probable next content prediction as displayed by pressing a soft key (Will, Figure 1B, Element 103).

In regards to claim 15, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the most probable next content prediction is selected from a group consisting of one or more textual predictions, one or more numeric predictions, one or more symbolic predictions, one or more iconic predictions, and one or more sounds predictions (Will, Figure 1B).

In regards to claim 16, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the user accepts one or more portions of the most probable next content prediction (Will, Figure 1B, Element 108).

In regards to claim 17, Will and Bodnar teach all the limitations of claim 11. They further teach a method wherein the user accepts the entire most probable next content prediction (Will, Figure 1B, Element 108).

In regards to claim 18, Will and Bodnar teach all the limitations of claim 11. They further teach the step of: editing the most probable next content prediction (Will, Figures 6A and 6B).

In regards to claim 19, Will and Bodnar teach all the limitations of claim 18. They further teach a method wherein the editing step comprises pressing a control of a navigation key to move the focus to a next content element and comparing the next content element to one or more content prediction alternates (Will, Figures 6A and 6B).

In regards to claim 20, Will and Bodnar teach all the limitations of claim 11. They further teach a method further comprising the steps of: retrieving one or more alternate predictive content from the personalized and learning database (Bodnar, Abstract); displaying the one or more alternate predictive content (Will, Figure 1B); and reviewing

the one or more alternate predictive content by a user using one or more controls of a navigation key (Will, Figure 1B, Element 103).

In regards to claim 21, Will and Bodnar teach all the limitations of claim 11. They further teach a method further comprising the step of: providing one or more additional content predictions (Will, Figure 1B, Element 108).

In regards to claim 22, Will and Bodnar teach all the limitations of claim 11. They further teach a method further comprising the steps of: receiving a request for less prediction (Will, Figure 1B, Element 108); and backing up the predictive content to an earlier point in the editing (Will, Figure 12B, Element 1211).

In regards to claim 23, Will and Bodnar teach all the limitations of claim 22. They further teach a method wherein the request for less prediction comprises a user pressing a control of a navigation key (Will, Figure 1B, Element 103).

In regards to claim 24, Will and Bodnar teach all the limitations of claim 11. They further teach a method further comprising the steps of: receiving further content entry from a user input (Will, Figure 1B).

In regards to claim 25, Will teaches a portable electronic device comprising: a display for displaying a content string including one or more content elements (Figure 1B); a user input for entering the one or more content elements of the content string (Figure 1B); and a user interface coupled to the display and further coupled to the user input, wherein the user interface is adapted to: determine a most probable completion alternative (Figure 1B); cause to the most probable completion alternative to be displayed (Figure 1B); and adding the most probable completion alternative to the

content string in response to receiving a signal from the user input that the user has accepted the most probable completion alternative (Figure 1B, Element 103). Will does not teach determining a most probable completion alternative using a personalized and learning database. Bodnar teaches, "By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Will with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to claim 26, Will and Bodnar teach a portable communication device as defined in claim 25 wherein the user input comprises: a navigation key having at least two control keys (Figure 4C), wherein a first control key provides for accepting of the most probable completion alternative (Figure 1B, Element 103 and Figure 4C).

In regards to claim 27, Will and Bodnar teach a portable communication device as defined in claim 26 wherein a second control key provides for removing the added most probable completion alternative from the content string (Figure 4C, and Figure 12B, Element 1211).

In regards to claim 28, Will and Bodnar teach a portable communication device as defined in claim 27 wherein a third control key provides for requesting a next most probable completion alternative (Figure 1B, Element 103 and Figure 4C).

In regards to claim 29, Will and Bodnar teach a portable communication device as defined in claim 27 wherein a third control key provides for overriding the most probable completion alternative (Figure 1B, Element 103 and Figure 4C), and further wherein a fourth control key provides for scrolling through one or more completion alternates (Figure 1B, Element 103 and Figure 4C, i.e. the wheel).

In regards to claim 30, Will and Bodnar teach a portable communication device as defined in claim 25, further comprising: a memory for storing one or more user interface data memory, wherein the one or more user interface data includes user interface data selected from a group consisting of context associations, sensitivity associations, user entered content strings, and language dictionaries (Figure 13B), wherein the user interface is adapted to determine the most probable completion alternative using the one or more user interface data memory (Figure 13B).

In regards to claim 31, Will teaches a portable electronic device comprising: a display for displaying a content string including one or more content elements (Figure 1B); a user input for entering the one or more content elements of the content string (Figure 1B); and a user interface coupled to the display and further coupled to the user input, wherein the user interface is adapted to: detecting a content entry from the user input (Figure 1B); causing the most probable next content prediction to be displayed on the display (Figure 1B); and adding the most probable next content prediction to the content entry on the display in response to receiving a user acceptance from the user input (Figure 1B). Will does not teach receiving a request from the user input for a content prediction identifying a most probable next content prediction by using a

personalized and learning database. Bodnar teaches, "By remembering what the user has previously inputted and by using context-sensitive menus and adaptive "quick" lists, the system can anticipate what the user needs to do at any given time and can guide the user through a step-by-step process to complete each task, thus facilitating the tasks that users most often perform." (Abstract). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Will with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to claim 32, Will and Bodnar teach all the limitations of claim 32. They further teach a portable electronic device wherein the user input comprises: a navigation key having at least two control keys (Figure 1B, Element 103 and Figure 4C), wherein a first of the at least two control keys provides for a request by the user for content prediction (Figure 1B, Element 103 and Figure 4C).

In regards to claim 33, Will and Bodnar teach all the limitations of claim 32. They further teach a portable electronic device wherein a second of the at least two control keys provides for the user acceptance of the most probable next content prediction (Figure 1B, Element 103 and Figure 4C).

In regards to claim 34, Will and Bodnar teach all the limitations of claim 33. They further teach a portable electronic device as defined in claim 33 wherein a third control key provides for a user request for a list of content prediction alternates (Figure 1B, Element 103, 108 and Figure 4C).

***Response to Arguments***

Applicant's arguments filed 6/26/2006 have been fully considered but they are not persuasive.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, it would have been obvious to one of ordinary skill in the art, a computer engineer, at the time of the invention to modify Will with the teachings of Bodnar and include a learning database with the motivation to provide the user with a faster method of inputting words in the system.

In regards to the Applicants argument that the speed of inputting data would not increase, the examiner disagrees. It is much quicker to press one button and have several messages that you can select from, rather than manually entering the messages letter by letter using a scroll wheel. The super key may be the actual scroll wheel, where the user presses the wheel inwards like a button and perhaps hold it for a second (or any predetermined period of time) to engage the super key.

***Conclusion***

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

***Inquiry***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Boris Pesin whose telephone number is (571) 272-4070. The examiner can normally be reached on Monday-Friday except every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kristine Kincaid can be reached on (571) 272-4063. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

BP

*Kristine Kincaid*  
KRISTINE KINCAID  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100